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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

		Docket Number:	
PRE-APPEAL BRIEF REQUEST FOR REVIEW			13681-0012001
I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, Box 1450, Alexandria, VA 22313-1450.	Application N	lumber	Filed
	10/600,182		June 20, 2003
	First Named Inventor		
	Bach		
Date of Deposit	Art Unit		Examiner
	1651		Sandra E. Saucier
Signature			
Typed or Printed Name of Person Signing Certificate			
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a Notice of Appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the			
applicant/inventor.			
assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		/RSMcQuade/ Signature	
			Ryan S. McQuade, Ph.D. Typed or printed name
attorney or agent of record 61,358 (Reg. No.)			(617) 542-5070
			Telephone number
attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34		October 29, 2009 Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.			
Total of 88. forms are submitted.			

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Bach et al. Art Unit: 1651

Serial No.: 10/600,182 Examiner: Sandra E. Saucier

Filed : June 20, 2003 Conf. No. : 8996

Title : PHARMACEUTICAL USE OF NITRIC OXIDE, HEME OXYGENASE-1 AND

PRODUCTS OF HEME DEGRADATION

Commissioner for Patents

P.O. Box 1450 Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request review of the rejection in the above-identified application of claims 18-20, 24-30, and 33-53 for alleged lack of enablement. Applicants respectfully submit that the rejection is based on a substantive error of law, leading to an incorrect finding of lack of enablement. The error of law relates to a misapplication of the standard for enablement in that the Office has required evidence of synergy among the claimed steps.

I. The Office Has Erroneously Required a Synergistic Effect

The claims currently under examination recite treatment of an organ recipient with a pharmaceutical composition comprising nitric oxide (NO) and a pharmaceutical composition comprising carbon monoxide (CO). See, e.g., pending claim 18. The claims recite that the treatments administered are sufficient to enhance survival or function of the transplant. No synergistic or additive effect is recited by the claims.

However, the Office in this case is apparently requiring some evidence of a synergistic or additive effect to find that the claims comply with the enablement standard. For example, in rejecting the claims for an alleged lack of enablement, the Office Action mailed April 30, 2009 (hereinafter, "the Office Action") states:

The issue is: have applicants have [sic] provided evidence that their claimed method, which is the co-administration of CO and NO to the recipient of the transplant has a positive effect on the success of the transplantation which is more than the administration of CO or NO alone.

Office Action at page 5. The Office Action further states:

A synergistic effect is not required to be present in the claim language. However, if the combined treatment of NO and CO to the recipient has no Attorney's Docket No.: 13681-0012001 / 00799; BIDMC Ref.: 727

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increased effect over the effect obtained with NO or CO administer [sic]

individually, there are enablement issues present with the claimed method because the claimed method cannot be practiced with a reasonable expectation of success over the scope of the claim, i.e. with humans.

Office Action at pages 6-7. The requirement for a synergistic or otherwise increased effect is contrary to what is required by law. Rather, the test of enablement is whether a person of skill in the art could make and use the claimed invention without undue experimentation. In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). A synergistic or additive effect is not required for enablement. See Ex Parte McOsker, Appeal No. 1996-3016 (BPAI 1996) (rejection for alleged lack of enablement overturned because no legal authority requires claims to be limited to a synergistic result to comply with the enablement requirement); Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1549 (Fed. Cir. 1983) ("synergism . . . is not required for patentability").

Applicants have provided evidence that each of NO and CO alone are suitable for therapeutic use in transplantation methods. See Amendment in Reply to Action of August 11. 2008, filed on February 11, 2009 (hereinafter, "the Reply"), at pages 10-12. Further, the present application provides substantial evidence that NO and CO can work in tandem to provide cytoprotection. Application, paragraphs [0193]-[0221]; see also the Reply at pages 12-13. Additionally, the specification provides significant guidance regarding the administration of NO and CO to a transplant recipient. See, e.g., application, paragraphs [0047]-[0059] ("Use of Nitric Oxide"); paragraphs [0088]-[0104] ("Carbon Monoxide"); and paragraphs [0105]-[0110] ("Combination Therapy"). In view of the prior art regarding organ transplantation, the guidance in the specification regarding administration of NO and CO, the level of skill in the transplant field, and what was known in the art regarding NO and CO, a person of ordinary skill in the art would be able to carry out the methods recited in the claims without undue experimentation.

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II. Conclusion

The Office's rejection of claims 18-20, 24-30, and 33-53 for alleged lack of enablement is based on a clear error of law. The Office has erroneously required synergy between NO and CO in treatment of transplant recipients to comply with the enablement standard. Such a requirement is contrary to the law that an applicant must merely teach one skilled in the art how to make and use the claimed invention. Applicants therefore request withdrawal of the rejection.

Applicants do not concede any positions of the Office that are not expressly addressed above, nor do Applicants concede that there are not other good reasons for patentability of the presented claims or other claims.

This Request is being submitted with a Notice of Appeal and the required fee. Please apply any required charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 13681-0012001.

Respectfully submitted,

Date: October 29, 2009 /RSMcQuade/

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